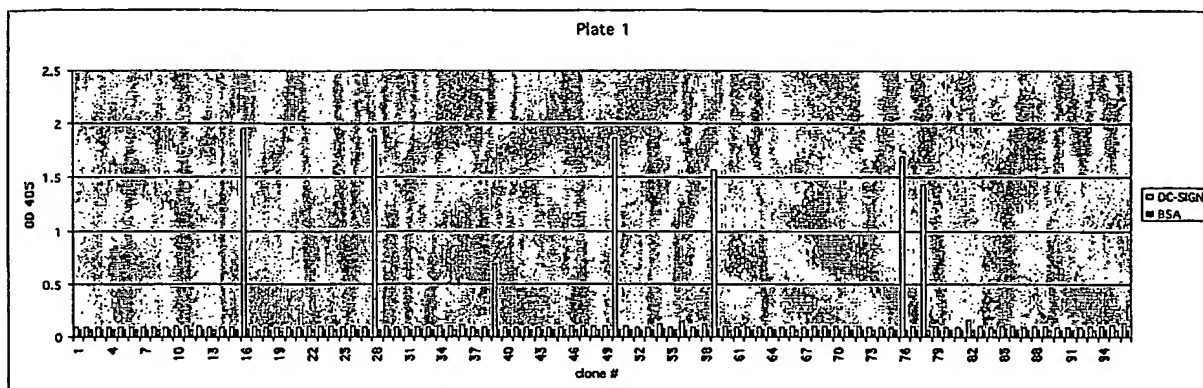


# Figure 1A

IgG1 library



# Figure 1B

IgG2a library

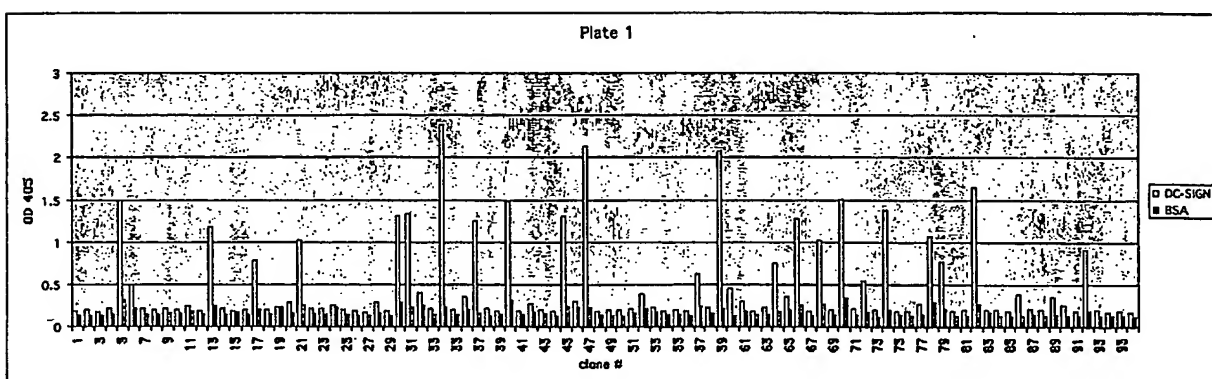


Figure 2

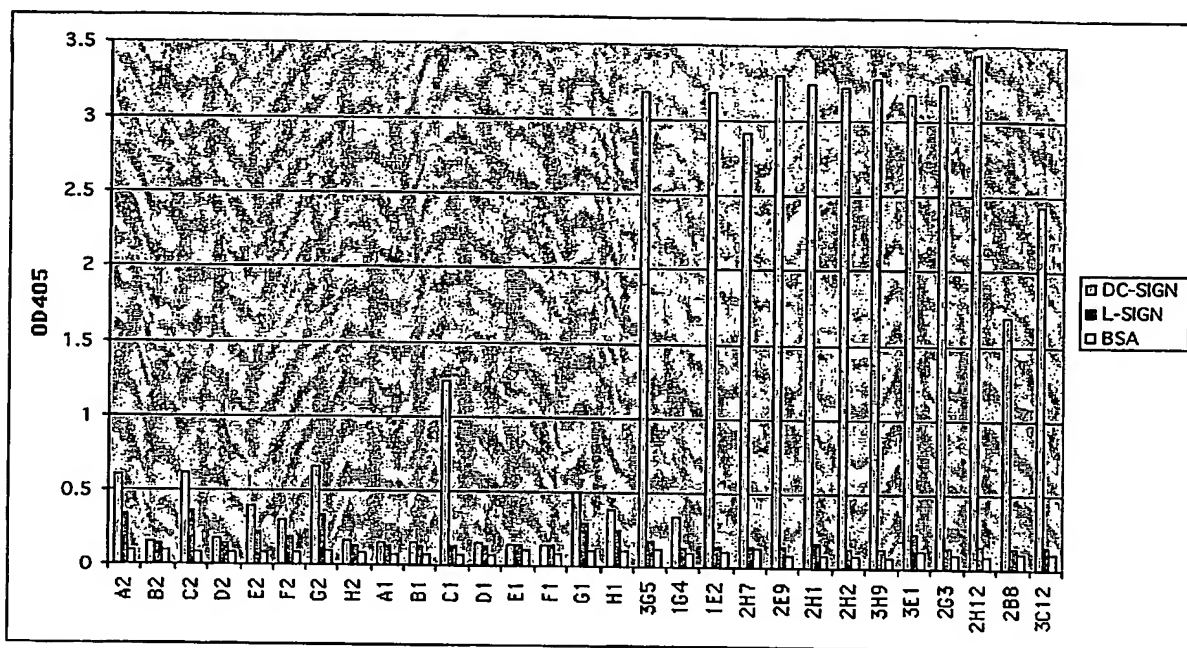
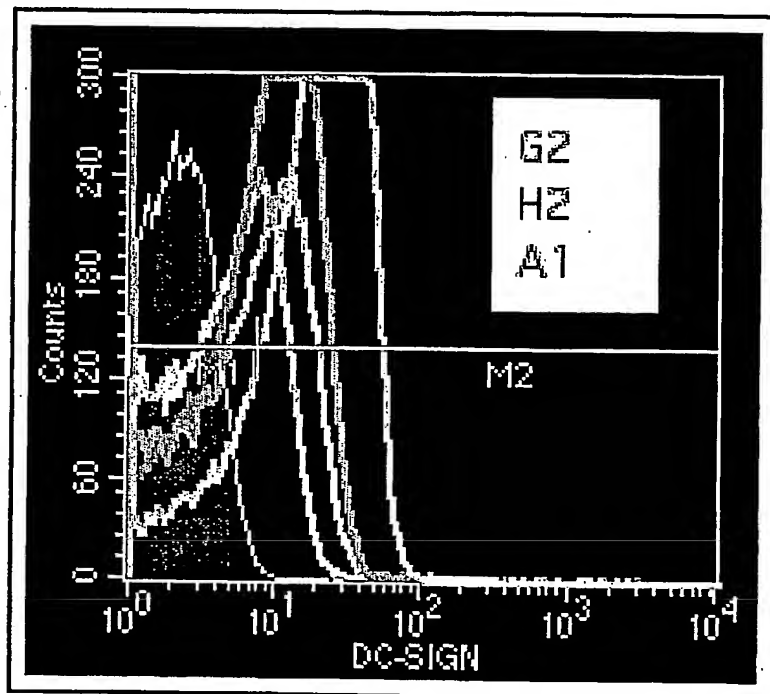


Figure 3



A1= clone 1  
H2=clone 15  
G2=clone 16

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Light chain sequences

Majority		D I Q M T Q T T S S L S A S L G D R V T I T C R A S Q D I N N Y L N W Y Q Q K P																																								
		10										20										30										40										
1	D I Q M T Q S P A S L S A S V G E T I T C R A S E N I H N Y L A W Y Q Q N Q																																									1G4LC
1	D I Q M T Q T T S S L S A S L G D R V T I T C R T S Q D I D N Y L N W Y Q Q K P																																									2B8LC
1	D I P M T Q T T S S Q S A S L G D R V T I T C R A S Q D I N N Y L N W Y Q Q K P																																									2H1LC
1	D I Q M T Q T T S S L S A S L G D R V T I S C R A S H D I N D Y L N W Y Q Q K P																																									2H2LC
1	D I Q M T Q T T S S L S A S L G D R V T I T C R A S Q D I S N Y L N W Y Q Q K P																																									3C12LC
1	D I Q M T Q T T S S Q S A S L G D R V T I T C R A S Q D I N N Y L N W Y Q Q K P																																									3E1LC
1	D I Q M T Q T T S S L F A S L G D R V T I S C R A S Q D I R N N L N W Y Q Q K P																																									3E7LC
1	D I Q M T Q T T S S L S A S L G D R V T I S C R A S H D I N D Y L N W Y Q Q K P																																									3H9LC
Majority		D G T V K L L I Y Y T S R L H S G V P S R F S G S G S G T D Y S L T I S N L A Q																																								
		50										60										70										80										
41	G K S P Q L L V Y N A K T L A V G V P S R F S G S G S G T Q F S L K I V S L Q P																																									1G4LC
41	D G T V K L L I Y Y T S R L H S G V P S R F S G S G S G T D Y S L T I N N L A Q																																									2B8LC
41	D G T V K L L I Y Y T S R L H S G V P S R F S G S G S G T D Y S L T I S N L E Q																																									2H1LC
41	D G T V K L L I Y Y T S S L Q S G V P S R F R G Y G S G T D Y S L T I S N L A Q																																									2H2LC
41	D G T V K L L I Y Y T S R L H S G V P S R F S G S G S G T D Y S L T I S N L A Q																																									3C12LC
41	D G T V K L L I Y Y T S R L H S G V P S R F S G S G S G T D Y S L T I S N L E Q																																									3E1LC
41	D G T V K L L I Y Y T S S L P S G V P S R F S G S R S G T D Y S L T I S N L E Q																																									3E7LC
41	D G T V K L L I Y Y T S S L Q S G V P S R F R G Y G S G T D Y S L T I S N L A Q																																									3H9LC
Majority		E D I A T Y F C Q Q G D T L P W T F G G G T K L E I K R A (SEQ ID NO: 9)																																								
		90										100																														
81	E D F G N Y Y C Q H F W N T P W T F G R G T K L E I K R A (SEQ ID NO: 10)																															1G4LC										
81	E D I A T Y F C Q Q G D T L P F T F G S G T T L E I K R A (SEQ ID NO: 11)																															2B8LC										
81	E D L V T Y F C Q Q G K T L P W T F G G G T K L E I K R A (SEQ ID NO: 12)																															2H1LC										
81	E D F A T Y F C Q Q G H T L P Y T F G G G T K L E I K R A (SEQ ID NO: 13)																															2H2LC										
81	E D I A T Y F C Q Q G D K L P F T F G S G T T L E I K R A (SEQ ID NO: 14)																															3C12LC										
81	E D L A T Y F C Q Q G K T L P W T F G G G T K L E I K R A (SEQ ID NO: 15)																															3E1LC										
81	E D I A T Y F C Q Q G D T L P P T F G G G T K L E I K R A (SEQ ID NO: 16)																															3E7LC										
81	E D F A T Y F C Q Q G H T L P Y T F G G G T K L E I K R A (SEQ ID NO: 17)																															3H9LC										

# Figure 4 b

Heavy chain sequences

```
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWVKQ Majority
-----+-----+-----+-----+
              10              20              30              40
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWIRQ 1G4HC
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWVKQ 1H2HC
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWVKQ 2B8HC
EVQLQQSGPELVKPGTSVKISCKASGYST - GYYIHWVRQ 2H1HC
EVQLQQSGPELVKPGTSVKISCKASGYST - GYYIHWVRQ 2H2HC
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWVKQ 3C12HC
EVQLQQSGPELVKPGASVKISCKASGYST - GYYMHWVKQ 3E1HC
EVQLQQSGAEELV R P G A L V K L S C K A S G F N I K - D Y Y I H W V K Q 3E7HC

SHVKSLEWIGRINPYNGATSYNQNFKDKASLTVDKSSSTTV Majority
-----+-----+-----+-----+
              50              60              70              80
SPGNKLEWMGYISYD - GNSDYNPSFKNRISITRDTSKNQF 1G4HC
SHVKSLEWIGRINPYNGATSYNQNFKDKASLTVDKSSSTTV 1H2HC
SHVKSLEWIGRINPYNGATYYNHNFKDKATLTVDKSSSTTV 2B8HC
RHVKSLEWIGRINPYSGATSYNQSFKDKASLTVDKSSSTTA 2H1HC
RHVKSLEWIGRINPYSGATSYNQSFKDKASLTVDKSSSTTA 2H2HC
SHVKSLEWIGRINPYNGATSYNQNFKDKASLTVDKSSSTTV 3C12HC
SHVKSLEWIGRINPYNGAPSYNQNFKDKASLTVDKSSSTTV 3E1HC
RPEQGLEWIGWIDPENGNTIYDPKFQ GKASITADTSSNTA 3E7HC

YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV Majority
-----+-----+-----+-----+
              90              100              110              120
FLRLNSLTTEDTATYYCVRDDSGR - - F P Q W G Q G T L V T V S A 1G4HC (SEQ
ID NO: 18)
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGSSVA 1H2HC
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV 2B8HC
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV 2H1HC
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV 2H2HC
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV 3C12HC
YMEVHSLTSEDSAVYYCVRSDNGYYSYPMDYWGQGTSVTV 3E1HC
YLQLSSSLTSEDTAVYYCARYYLG - - - - V D Y W G Q G T S V T V 3E7HC

S S (SEQ ID NO: 19) Majority
-----
-----

S S (SEQ ID NO: 20) 1H2HC
S S (SEQ ID NO: 21) 2B8HC
S S (SEQ ID NO: 22) 2H1HC
S S (SEQ ID NO: 23) 2H2HC
S S (SEQ ID NO: 24) 3C12HC
S S (SEQ ID NO: 25) 3E1HC
S S (SEQ ID NO: 26) 3E7HC
```

# Figure 4c

IgG2a library  
Heavy Chains

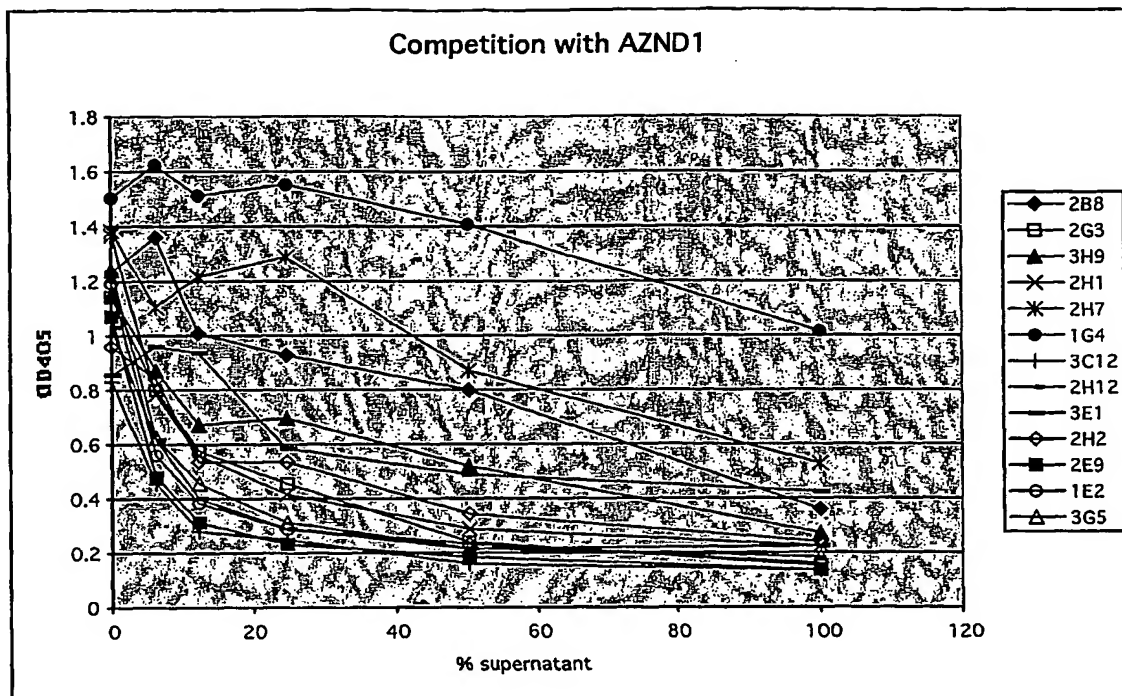
	CDR1	CDR2	CDR3
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(SEQ ID NO: 27)			KATLTADKSSSTAYMQLSSLTSEDSAVYFCARG
EVQLQSGAEIVKPGASVKLSCTASGENIK	DTYMH	WVKRPGQGLEWIG	RIDPANGNTKYDPKFG
(SEQ ID NO: 28)			KATLTADTSSNTAYLQLSSLTSEDSAVYFCARD
EVQLQSGAEIVKPGASVKLSCKASGYTFR	SYWMQ	WVKRPGQGLEWIG	AIYPGDGDTRYTQKEFG
(SEQ ID NO: 29)			KATLTADKSSSTAYMQLSSLTSEDSAVYFCARG
EVQLQSGPDLVKGASVRLSCKTSGETFA	SYIYH	WVKRPGQGLEWIG	WIFPGNFKTEYNEKEFG
(SEQ ID NO: 30)			KATLTADRSSSTAYMQLSSLTSEDSAVYFCARG
EVQLQSGPDLVKGASVRLSCKASGETFA	SYIYH	WVKRPGQGLEWIG	WIFPGNNTKSNKEKEFG
(SEQ ID NO: 31)			KATLTADKSSSTAYMQLSSLTSEDSAVYFCARG
EVQLQSGPDLVKGASVRLSCKASGETFA	SYIYH	WVKRPGQGLEWIG	WIFPGNNTKSNKEKEFG
(SEQ ID NO: 32)			KATLTADKSSSTAYMQLSSLTSEDSAVYFCARG
EVQLQSGAEIVKPGASVKLSCTASDENIK	DTYIQ	WVKRPGQGLEWIG	RIDPANGRIKYDPKFG
(SEQ ID NO: 33)			KATLTADTSSNTAYLQLSSLTSEDSAVYICTAY
EVQLKESGPGIVAPQSLSITCTVSGFSL	RYTVH	WIRPPGKGLEWIG	MTWGGGTTDYNALAKS
11(SEQ ID NO: 34)			RLSISKDNSESQVFKMDSLODDTAKYICARI
EVQLQSGTEIVKPGALVKLSCKASGENIK	DYFMH	WVKRPGQGLEWIG	WIDPKNGTIYDPEQV
15(SEQ ID NO: 35)			KASITADTSSNTAYLQLSSLTSEDSAVYICTTT

Light chains

DIAMTQSHKFMSTPVGDRVSITC	KASQDVSTA	VA	WYQKRPQSPKLLIY	SASVRYT	GVPDRFTGSGSGTDEFTTISSSVQAEDIALVYIC	QOHYITPLT	FCAGTKLEIKR	1(SEQ ID
NO: 36)								
DVMTQTPFLTSVIGIQPASISC	KSSQSLDSDGKTYLN	MLLWRPGQSPKRLIY	LVSKLDS	GVPDRFTGSGSGTDEFTLKISRVEAEDILGVYFC	WQDTHFPFH	HVRCWDQAGTT	2(SEQ ID	
NO: 37)								
SVLTQSPKSMMSVGERVTISC	KASENVGTY	VS	WYQKRPDQSPKLLIY	GSSNRST	GVPDRFTGSGSARDFTLTITISSSVQAEDIALDYHC	GQSINYPPPT	FCGGTKLEIKR	3(SEQ ID
NO: 38)								
DIVLTQSHKFMSTSVGDRVSITC	KASQDVSTA	VA	WYQKRPQSPKLLIY	WASTRHT	GVPDRFTGSGSGTDYTLTITISSSVQAEDIALVYIC	QOYYSTPRT	FCGGTKLEIKR	4(SEQ ID
NO: 39)								
RYQMTQTITSSLSASIGDRTVISC	SASQDITWYLN		WYQKRPDGTWVLLIY	YTSRLHS	GVPSRFTGSGSGTDYSITISNLEPEDVATVYIC	QOYGNLPHY	FCGGTKLEIKR	5(SEQ ID
NO: 40)								
DIQCTQTITSSLSASIGDRTVISC	RASQDISNYLN		WYQKRPDGTWVLLIY	YTSRLHS	GVPSRFTGSGSGTDYSITISNLEQADITATVYIC	QQGKTLPPWT	FCGGTKLEIKR	7(SEQ ID
NO: 41)								
RHQTQSHKFMSTSVGDRVSITC	KASQDVSTAVA		WYQNPQSGSLKLLIY	WASTRHT	GVPDRFTGSGSGTDYTLTINSVQAEDILTYIC	QOHYITPLT	FCAGTKLEIKR	8(SEQ ID
NO: 42)								
RYPPAQTTSSLSASIGDRTVISC	RASQDISNYLN		WYQKRPDGTWVLLIY	YTSRLHS	GVPSRFTGSGSGTDYSITISNLEQEDITATVYIC	QQGNLPPPT	FCGGTKLEIKR	11(SEQ ID
NO: 43)								
DIVTQSPASLAVSIGQRATISC	KASQSDVDYDGDVYMN		WYQKRPQSPKLLIY	AASNLHS	GVPSRFTGSGSGTDYSITISNLEQADITATVYIC	QQGKTLPPWT	FCGGTKLEIKR	15(SEQ ID
NO: 44)								

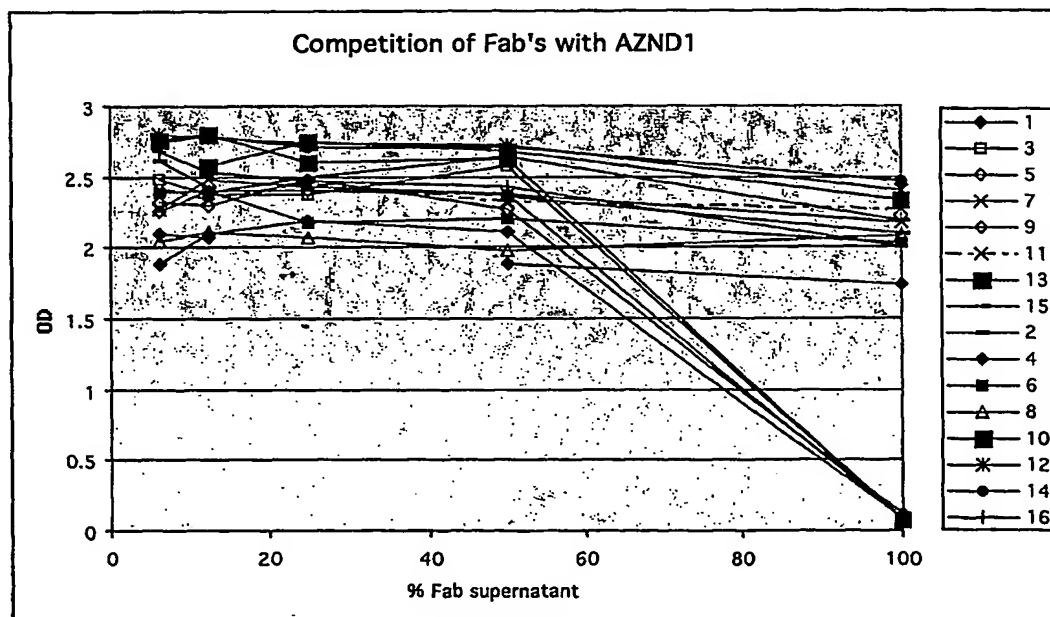
# Figure 5A

IgG1 library



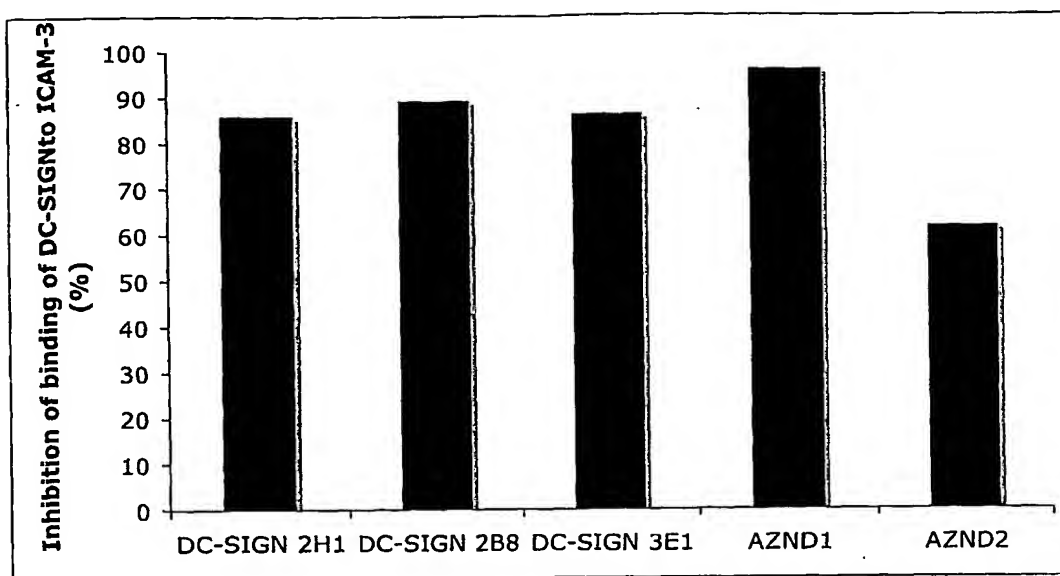
# Figure 5B

IgG2a library



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Figure 6



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